

tively. **CONCLUSIONS:** In this study of routine clinical practice in Bulgaria, only 4.5% of women initiating denosumab discontinued treatment within 24 months, compared with more than half of those initiating monthly oBPs.

PMS96

ASSESSMENT OF COMPLIANCE AMONG PATIENTS WITH ARTHRITIS

Petkova V¹, Konova M¹, Andreevska K², Dimitrov M¹, Petrova G¹

¹Medical University - Sofia, Sofia, Bulgaria, ²Medical University - Plovdiv, Plovdiv, Bulgaria

OBJECTIVES: Many studies prove non-compliance to medication to be one of the biggest problems in health care today. Non-compliance can lead to increased cost of care due to additional hospitalizations, emergency care, medication. These facts are relevant for patients with arthritis as the effects of non-compliance can increase the risk of acute crisis, pain and sick pays. Our objective was to examine the factors that can lead to non-compliance among patients with arthritis. **METHODS:** The Morisky 8-item Medication Adherence Questionnaire was applied to 96 patients with arthritis. After the ranking of the patients to the three groups – with low adherence, with medium adherence and with high adherence, those that were in the first group were asked about the factors that make them not compliant with the medication. The factors were grouped into two groups – subjective (expensive treatment, forgetting to take medication, difficulties to follow the regimen, etc.) and objective (ADRs, difficulties with the package, difficulties to find the prescribed medication in the pharmacy, etc.) **RESULTS:** Thirty-one per cent were scored with low adherence, varying from 3 to 8 relevant to complete failure to take the prescribed drugs. The factors that were outlined were mainly objective – 52% - ADRs; 49% - difficulties to open the package. From the subjective factors 15% from the respondents rank the treatment as expensive and they answer that they cannot afford it to purchase the prescribed treatment. **CONCLUSIONS:** Drug treatment does not appear to be a significant problem in management of arthritis, as over 69 % of the patients were taking their medications all or most of the time. However the subjective factors can be demotivating for the patients and they have to be taken in mind during the patients' consultation by the health care providers in order to be increased the rate of compliance.

PMS97

HOW DO WE ESTIMATE QUALITY ADJUSTED LIFE YEARS (QALYS) IN RARE DISEASES? A CASE STUDY IN HYPOPHOSPHATASIA

Lloyd A¹, Gallop K², Hutchings A³, Acaster S²

¹Bladon Associates, Oxford, UK, ²Acaster Consulting Ltd, London, UK, ³Dolon Ltd, London, UK

OBJECTIVES: Quality of life weights (utilities) are requested by many decision makers. In rare diseases the reliance on very small single arm trials makes it almost impossible to sensibly aggregate health-related quality of life (HRQL) data. This study presents a case study in hypophosphatasia (HPP), an ultra-rare disease, where two different methods were used to estimate utilities. **METHODS:** Study 1: Detailed case histories were developed which described the functional, symptom and HRQL burden for hypothetical patients with HPP (adults and children) through interviews with clinical experts (n=6). Seven case histories, defined by predicted 6 minute walk test (6MWT) for those aged 5+ and the need for invasive ventilation for infants, were then assessed by experts (n = 9) using EQ-5D-5L. Study 2: A survey of patients with HPP and parents recruited through advocacy groups asked people to assess HRQL by EQ-5D-3L and also to report on mobility (as a proxy for the 6MWT). No infant states were included in study 2. **RESULTS:** Study 1: Development of the case histories was challenging because of the experts' unfamiliarity with 6MWT in clinical practice and their limited exposure to the possible broad range of patient severity. EQ-5D utilities were: infants <5 on invasive ventilation = -0.09, no ventilation=0.24; children/adults ranged from 0.86 (>82% 6MWT) to 0.23 (<46% 6MWT). Study 2: children's (n=9 parents) EQ-5D scores ranged from 0.79 (>82% 6MWT) to -0.24 (<46% 6MWT); and adults (n=25) ranged from 0.51 (>82% 6MWT) to -0.01 (<46% 6MWT). **CONCLUSIONS:** Two separate studies describe the HRQL impact of HPP in adults and children. Utility values reported by patients and parents were consistently lower than those reported by experts. Both studies have important limitations, including the sample size. On a practical level the QALY based system does not seem so well suited to decisions regarding orphan drugs.

PMS98

REVIEW OF PATIENT REPORTED OUTCOME MEASURES USED IN CLINICAL AND COST-EFFECTIVENESS STUDIES TO MEASURE UTILITIES IN THE TREATMENT OF PSORIATIC ARTHRITIS AND ANKYLOSING SPONDYLITIS

Syeda SS¹, Jugl SM², Gunda P¹

¹Novartis Healthcare Pvt. Ltd., Hyderabad, India, ²Novartis Pharma AG, Basel, Switzerland

OBJECTIVES: Identification and review of used methods to derive patient utilities for health economic modelling in psoriatic arthritis (PsA) and ankylosing spondylitis (AS) **METHODS:** A literature search of Embase, MEDLINE from 1996-2015 was conducted to identify health economic, clinical studies that hold information about deriving utilities in PsA, AS. Additionally HTA submissions in PsA, AS were also screened. Publication inclusion was limited to in English language, biological therapy in PsA or AS. **RESULTS:** In total the search retrieved 3,175 articles, of which 124 fulfilled screening criteria. Most of the publications were screened for AS (n=73), followed by PsA (n=46) while five publications included both indications. Across studies baseline characteristics varied in age (Years, PsA: 35.5–65.0; AS: 24.4–61.0), disease duration (Years, AS: 0.7–30.2; PsA: 1.7–22.2) and gender distribution (Females, AS: 0–70%, PsA: 25–88%). No study was identified that used direct methods like time trade-off or standard gamble for utility derivation. Among generic measures SF-36 (n=27 for PsA, n=55 for AS), EQ-5D (n=10 PsA, n=14 AS) were primarily used. In total 45 different disease specific tools were identified (PsA, n=30; AS, n=15). The HAQ-DI (n=36) and ASQoL (n=21) were the most common tools in PsA, AS respectively. Among the cost-effectiveness studies 13 utility derivation algorithms in PsA and 5 in AS were identified. EQ-5D was the most commonly used HRQL instrument to derive utilities (PsA, n=9; AS, n=3). Most cost-effectiveness models used HAQ-DI in PsA while BASFI, BASDAI were used in AS to derive utilities. **CONCLUSIONS:** Even though more publications were identified in AS, more utility derivation algorithms were identified in PsA. However no standard process has been established

yet. Taking into consideration the variety of HRQoL tools and data available, more options could be explored to identify the most sensitive utility approach.

PMS99

THE BURDEN OF RHEUMATOID ARTHRITIS IN RUSSIA

Pedersini R¹, Karateev DE², Vasilescu RS³, Alvir JM⁴, Spurden D⁵, Smolen JS⁶

¹Kantar Health, Epsom, UK, ²V.A. Nasonova Research Institute of rheumatology, Moscow, Russia,

³Pfizer Inc., Brussels, Belgium, ⁴Pfizer, Inc., New York, NY, USA, ⁵Pfizer Inc., Kingston Upon

Thames, UK, ⁶Medical University of Vienna, Vienna, Austria

OBJECTIVES: The enormous socioeconomic impact of rheumatoid diseases has been increasingly studied in the USA and Europe. The objective of this study is to determine the burden of RA in Russia, focusing on outcomes such as health-related quality of life (QoL: EQ-5D, HAQ-DI), work productivity (WPAI) and use of healthcare resources (healthcare provider, hospital and emergency visits). **METHODS:** A cross-sectional cohort of 408 adult patients with a diagnosis of RA for at least 12 months were recruited in 2013-2014 by 51 rheumatologists, in Moscow and 12 other Russian regions. Patients with concomitant Crohn's disease, psoriasis or other forms of arthritis were excluded. Subjects underwent an assessment of their RA status (previous 12 months to current). General linear models predicted outcomes while controlling for main predictors (current treatment, region, current disease activity – DAS28) and covariates (sociodemographics, RA activity in past week). **RESULTS:** Most patients were female (78%), recruited in Moscow (43%) and followed by public hospitals (90%). Half were at radiologic stage II, overweight, at functional class 2 and with an invalidity pension; 74% had moderate and 22% severe disease activity (DAS28). Current EQ-5D and HAQ-DI scores showed significant impairment (0.6, 1.4); patients reported on average 15% absenteeism, 21% presenteeism, 24% overall work impairment and 49% activity impairment; over the past 12 months, on average they visited a rheumatologist 6 times, 17% were hospitalised and 2% had emergency visits. While patients in Moscow reported lower QoL, they also had lower absenteeism and resource use. RA activity in past week was strongly associated with all outcomes. **CONCLUSIONS:** The majority of Russian RA patients had moderate activity and poor outcomes. While there was no significant difference in private vs. public hospitals, Moscow patients reported lower absenteeism and resource use than the other regions combined.

PMS100

A SYSTEMATIC REVIEW OF THE HUMANISTIC BURDEN OF GOUT

Neves C, Shields GE, Beard S

BresMed, Sheffield, UK

OBJECTIVES: Gout is often overlooked despite the pain caused by acute flares and the joint damage caused by the development of debilitating tophi (deposits of uric acid crystals). The study objective was to review and summarise the current evidence of the disease burden of chronic gout, in relation to health-related quality of life (HRQL), and to identify key factors correlated with an increased disease burden. Our primary aim was to support the economic evaluation of new treatments for gout. In addition, we identified key data gaps that may need further investigation. **METHODS:** A systematic literature review was conducted using the MEDLINE database and The Cochrane Library. Articles published in English between January 2000 and July 2014 that reported the humanistic burden (HRQL and/or utility) of gout were identified. Key data were extracted and summarised, with key themes and data gaps identified. **RESULTS:** Searches identified 323 studies, of which 21 were relevant to the humanistic burden of gout. The humanistic burden was largely due to physical disability and pain resulting from chronic clinical manifestations. Utility weights, as assessed by Short Form 6 dimensions, were estimated at 0.53 for a patient with severe gout (3+ flares/year and tophi) and 0.73 for an asymptomatic patient with serum uric acid levels <6mg/dL. **CONCLUSIONS:** The evidence confirms that gout represents a significant burden in terms of HRQL. A reported growing prevalence means this is likely to be of considerable concern for healthcare decision makers. In light of this, effective urate-lowering treatments are likely to be valued, if they can be clearly demonstrated to be both clinically effective and cost effective. There is a need to develop a comprehensive set of comparative HRQL utility assessments, especially in non-US countries.

PMS101

UNDERSTANDING PATIENTS' SOCIO-ECONOMIC BURDEN IN RHEUMATIC DISEASES

Tomek D¹, Hroncova D², Pechac P³, Barancikova K⁴, Koren B¹

¹Slovak Medical University, Bratislava, Slovak Republic, ²InovaHealth Ltd., Suchohrad, Slovak

Republic, ³Alexander Winter Hospital Pharmacy, Piestany, Slovak Republic, ⁴League against

Rheumatism, Piestany, Slovak Republic

OBJECTIVES: The aim of this study was to investigate the socio-economic impact of chronic autoimmune diseases, mainly rheumatoid arthritis (RA) and work disabilities, among patients in Slovakia. **METHODS:** Patients were prospectively recruited in the National Institute for Rheumatic Diseases in 2014 – 2015 and the data were collected through specifically designed questionnaire. Research was prepared and consulted with relevant patient organization League against Rheumatism in Slovakia. **RESULTS:** The sample (200 respondents) was predominantly female (57%) with diagnosis of RA (66%) followed by ankylosing spondylitis (17%). As many as 65% of the patients became permanently work disabled at the average age of 41, with full work disability being more common (36%) than partial disability (30%). The occurrence of sick leaves within preceding 12 months among actively working was 52% with an average length of 51 days. Three most frequently reported areas negatively affected by the disease: social activities (reported by 65% respondents), professional career (53%) and quality of a relationship with their partner (25%). Twenty-five percent of respondents had to change their jobs due to the disease. Average personal expenses of the treatment in the preceding 3 months were 76€, traveling costs in the first place. Despite disease stabilization in the sample majority, 70% of respondents stated restrictive (51%) or very restrictive (19%) impact of the disease on their overall functioning. In the preceding week, strenuous activities and sports became the most limited. The support from